



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

P.O. Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

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Environmental Cleanup Office

August 5, 1999

Mr. John P. Gross
Senior Environmental Manager
Weyerhaeuser
CH 1K29
P.O. Box 2999
Tacoma, WA 98477-2999

RE: Remedial Investigation Report – Chlor-Alkali Plant, Longview, Washington

Dear Mr. ~~Gross~~: *John*

This letter serves as the Department of Ecology's (Ecology) comment upon and approval of the Remedial Investigation Report (RI) for Weyerhaeuser's Longview Chlor-Alkali Plant.

The RI is, Ecology believes, well done and a credit to your company and consultants who produced it. Comments are as follows:

1. Section 5.2.3 Transport Pathways discusses the likelihood of mercury transport being controlled by ground water levels and flux rather than the infiltration of meteoric water through the soil column. This section concludes in part, "...it is most likely that the major source of mercury in ground water is from isolated mercury globules present within the [bedrock] basalt fractures and not from mercury currently present in soil."

This statement seems at odds with data and evidence presented elsewhere in the RI which indicates a different conclusion. Comprehensive soil sampling data show a varying degree of residual mercury in soils around the site. Average mercury concentrations range from lows of 2-3 mg/kg (West Area, Liquefaction and Loading Areas) to highs of 46-54 mg/kg (No. 1 Cell Room Site and Brine Spill Area).

Earlier in the RI, Section 4.3.3 estimates mass flux of mercury from the site from two ground water sub-pathways: an alluvial aquifer discharge, and basalt zone discharge. The RI models ground water Mercury transport and estimates 1998 loading to the Columbia River to be approximately 0.62 pound per year and 0.0002 pound per year respectively from these two pathways. The section then concludes: "The total mercury discharge for both groundwater

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zones, therefore, was approximately 0.6 pound (0.28 kilogram) in 1998. Because of its low permeability, *the basalt zone contributes a negligible fraction of this total.*" (Emphasis added)

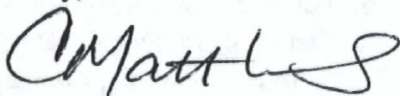
The contribution to ground water loading by residual mercury trapped in the basalt is difficult to model and quantify. The RI, nevertheless, has acknowledged and considered the problem, deriving the approximate annual loading numbers. With this work and other information and data presented in the RI, it seems more likely that the major controlling factor for mercury in ground water is the presence of widely distributed residual contaminant in remaining site soils and the flux of ground water levels (not meteoric infiltration) through them.

2. Section 5.4.6 summarizes the MTCA cleanup level comparisons and probable focus for a Feasibility Study (FS) based on the work presented in the RI. This section concludes: "Based on the results from sediment, surface water, and fish tissue, these media will not be addressed in the Feasibility Study."

Ecology believes this RI to be thorough, well done, and agrees with most conclusions presented in it. However, it may be premature with this letter to rule out all future work on these media. As you know, the US EPA (EPA) has classified this site as "potentially eligible" for National Priority listing and is involved in oversight to some degree of this project. Ecology recommends EPA concurrence with these conclusions before flatly ruling out further consideration of these media.

Thank you for the opportunity to review and comment upon this work. Please call me if you have questions regarding this letter or Ecology's involvement with this project.

Sincerely,



Cris Matthews
Regional Hydrogeologist
Solid Waste & Financial Assistance Program

cc: Anne Bolling, CH2M Hill
Monica Tonel, US EPA Region 10